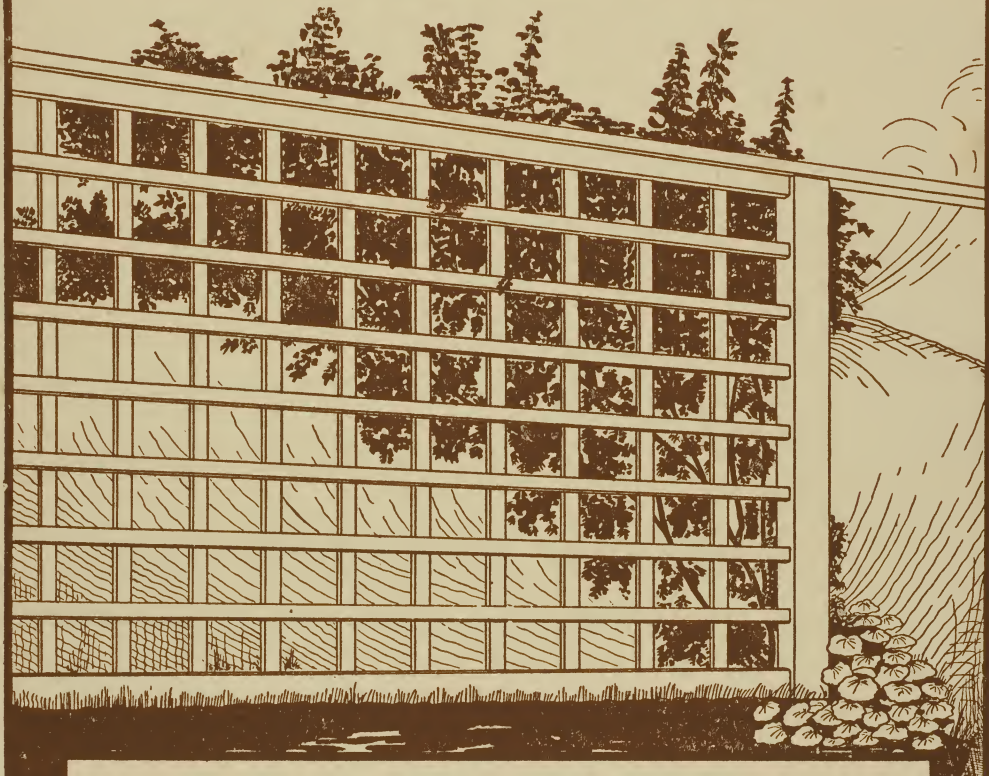
California Garden



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Information Cheerfully Given on All Plant Troubles.

The California Garden

Published Monthly by the San Diego Floral Association
One Dollar per Year, Ten Cents per Copy

Vol. 12 POINT LOMA, CALIFORNIA, JULY, 1920 No. 1

AN ANNIVERSARY

This number marks the beginning of the twelfth year of the California Garden. We have been indulging in pleasant retrospect as to what we think we have accomplished as a magazine during the year just past, but as we ponder the subject, the pleasure is less and less unalloyed with pain over the things we wanted to do, and were unable to do, or just plain failed in doing. When ye editor was about the age of this magazine he used to have birthday parties and receive birthday gifts. The "Garden" has received gifts—not on its birthday—but every month of the year —the rarest and most valuable of all gifts—that of time and talent from a considerable number of people. Without these "birthday presents" this magazine would have ceased to exist. We have had in the past and have now on our staff—serving without any compensation other than the warm, pleasant, comfortable feeling of having furthered the work which is this magazine's only reason for existing—writers to whom any magazine in America would be glad to pay liberal space rates, and in some instances they have done so. These men and women—authorities upon the subjects on which they write—are the backbone of this magazine, and it is appropriate at this time, and in this way that he of the paste pot, shears and blue pencil express his sincere appreciation of their support. There have been others, whose names do not appear in the columns of the Garden, who have, inconspicuously but earnestly, worked in divers other ways for the upbuilding of the magazine, and no expression of appreciation would be complete unless extended to them, also.

In the matter of advertising a gain can be reported, but there should be many more business firms represented in the advertising space of the Garden—quite as much for their sake as for the much needed revenue their advertising patronage would bring to the coffers of this magazine.

It has been demonstrated to the entire satisfaction of anyone who cares to investigate it, that the California Garden is a most valuable medium for **class** advertising. This means, of course, the advertising of firms whose products or services are especially necessary or desirable to those interested in gardens, and the list of these is much longer than would at first appear. It is a fact that in no other way can such firms present their appeal to the particular people they wish to reach—and to **those only.**

On the whole, however, we believe that the outlook is very encouraging. We expect to have even more good horticultural writers contributing to the columns of the Garden, and we hope that we may by increased advertising revenue and a considerably augmented subscription list, realize our ambitions towards making this a larger and an even more attractive publication.

THE BURNING BUSH

By P. D. Barnhart

"And the Angel of the Lord appeared unto him in a flame of fire out of the midst of a bush; and he looked, and behold, the bush was not consumed. And Moses said, 'I will turn aside, and see this great sight why the bush is not burnt.' "

Whether the fragment of sacred story, here quoted, was based on fact, or whether it is an allegory, matters not. Theologians will decide as to the one or the other, according to their individual interpretation of the scriptures. In either case the story contains valuable lessons, one of which I shall endeavor to teach at this time. This world is a very large one. By the term "world" is meant the earth and the fullness thereof, and in it abounds a variety of form, of color, of sensation; infinite in number.

A benificent Creator, wisely and well, has provided for his creature Man, an intellectual feast, no matter what his temperament may be. If his ear is sensitive to sound, or his eye appreciative of color and of contour, or his entire being in accord with the harmon-

ies in all nature, he will find something suited to satisfy his soul. In the case of Moses, one of the most learned men of his time, indeed of all time, while caring for a flock of sheep in a country very similar to California in its primitive condition, a strange sight suddenly appeared before him—a burning bush that was not consumed. His attention was arrested and a desire to investigate and learn the reason why, was the method God used in his case, to lead him into a larger sphere of usefulness than he had hitherto occupied.

Strange and interesting as the Burning Bush was, it was no more interesting than are the sights all about us; inherent in bird and bush, in bee and tree, in flower and fern, if we will but turn aside from the activities of life and pause in our mad haste to acquire fame or fortune or both, and look at the wonderful things all about us.

The probability is that Moses passed that same scrubby Mimosa bush many times before, without even looking at it. He, like a multitude of folk nowadays, had to have something spectacular to arrest his attention. Because of our careless indifference to the beauty and the mysteries of nature which invite us to study, we content ourselves with a discussion of the dress and the defects of our fellows.

Let us get back to the "burning bush" episode again. There are plenty of such anywhere and everywhere we go, and we need not go far from home, either.

Once upon a time my lot was cast out upon the desert where the heat was intense, and the "milk weeds" numerous. No other vegetation with juice in it in sight. First, then, why this succulent plant with its white flossy covering and the pretty flowers. A colony of ants had their home nearby one of these desert species of milk weed, and as I looked at it, there were the ants pinching the edges of the leaves, which caused the milk to flow, and those ants had a feast of condensed milk during the life of the plant, which would be about three months.

One other time while investigating the "Mesquite" bushes on a desert, to learn about the "mistletoe" which saps the life out of the thorny shrub, there was a birds nest, a little larger than a base ball, and to protect her babies from the intense heat, the mother bird had built an ingenious cover over it; a roof, if you please.

Go out over the hills of this Southland and look at the tar weed—Grindellia robusta—with the wonderful coat of varnish on the bud to prevent evaporation of sap, while the flower is developing. Study the "ant lion," an interesting little insect with two trowels fast to the top of his head, each implement operated with a spring, and how the little fellow excavates an inverted cone shaped hole, in dry sand or dust, in which, when finished, he carefully conceals himself in the bottom, and waits until a luckless ant or worm crawls to the edge and slides to the bottom, to become food for the owner of the premises.

Go to the beach and watch the little crabs feed on the vegetable or animal life found on the rocks—I never could determine which—and see how systematic they are. First one hand, then the other to convey the food to their mouths. Never the same hand twice in succession. When in the mountains where "carpenter birds" abound—this bird is an enlarged specimen of the red headed woodpecker of the Atlantic states—see with what mathematical precision they make holes to deposit acorns in, an acorn to each hole, and are fit so snugly in, that they may be extracted only with a good knife. Larvae of some insect grow in these acorns, which furnish meat for the birds. Woe be to the squirrel who ventures onto a tree containing one of the preserves of this feathered tribe.

See with what ingenuity the Oriole fastens its nest to the branch of a tree so far out that it is pendant, and a snake in quest of young birds, would surely slide off the limb were he to attempt the robbery, or how this same bird weaves its nest to a palm leaf.

Observe how a Mistletoe seed is fastened to the limb of a tree by the mucilage adhering to it, after passing through a bird; there to sprout, and root itself first, into the bark, then grow into the wood, to feed upon the sap of the host.

A recitation of all these wonderful things in nature would fill a volume of large size, but if these few observations will lead the reader to SEE, and seeking acquire a fund of information which shall make him a more valuable member of society, then the time spent in the writing of this article will not have been in vain.

Visitors to all Flower Shows held this spring, where Fremontia Mexicana was on exhibition were amazed and delighted with the wonderfully beautiful golden colored flowers, borne in great profusion on the long willowy stems. Even since Payne, the apostle of native plant culture, introduced this subject, I had my doubts about it being a species, distinct from F. Californica. These doubts have been observed and studied at close range, and here and now is recorded the distinctive differences of the two species. F. Mexicana produces black seeds. The flowers are borne on the growth of the current year, morover they grow on the stem on the opposite side from the leaf. Most all plants in good standing among their fellows, and among gardeners produce their bloom in the

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Patronize the Garden Advertisers

In Our Elfin Woodlands

By RALPH W. SUMNER

The summer days are at hand, the red heart of Scorpio burns in the night sky, the grass has changed from a green to brown and we welcome the season of vacations with its wholesome outdoor life. Why not make a real study of nature this year, the branch you like best, be it wild-flowers, stars, birds or shells. It is much more satisfaction, and a genuine pleasure to meet a plant, call it by name and know that it belongs to a noted and useful family, and that itself is useful as well as ornamental, than it is just to say, "what a pretty flower; I wonder what it is," and then forget all about it.

Well, what say we go a wild-flower hunting, and meet a few notable friends; perhaps make a new one, for there is always the possibility of finding something rare.

Just now, the first week in June, there are patches of brilliant pink on the mesas. Close inspection will reveal little square stemmed bushy plants, literally covered with large, white-eyed pink flowers. The yellow anthers are worth still closer study, for they are twisted like small augers. If you should sometime see an Indian picking these flowers, know that he is not gathering them for their beauty, but to hang up and dry as a fever remedy. He calls them "Canchalagua," but botanists say Erythraea venusta, venusta from Venus meaning beautiful. Furthermore it belongs to the family of the famed Fringed-Gentian made immortal by Byrant.

Pogogyne Douglasii sounds rather formidable, I'll admit, but you will not hold that against it when you smell its sweet mint-like odor. Growing in the dried up pools of last winter's rain these low slender members of the Mint family brighten the dry places with their dark purple whorled spikes. And if you want to see a flower that will make a hot-house orchid look sick and uninteresting, get your lens and look into the throat of this little beauty.

If people once learned what wonders can be unfolded, especially in the smaller insignificant looking wild-flowers with the aid of a good lens, the optical shops would have to put in a larger supply at once.

The stonecrop family is another summer bloomer, at least in most cases. Like the ice-plant it stores water in the Spring in reservoir-like stems and leaves, to be used when the ground gets too dry to support vegetable life. Most of these plants are recognized by a basal rosette of fleshy leaves, the flower stalks rising from its midst. Dudleya pulverulenta is the largest and most noticeable one. It's flower stems and leaves are covered with a white bloom, and the spreading branches of flowers are cream-colored. Dudleya lurida is similar in form, but with brinzed stems, narrower leaves and red flowers.

Stylophyllum edulis, "Ladies'-fingers," is quite different, the basal leaves being cylindrical, about the size of a lead-pencil and of light green color. The wide-open flowers are buff. The Indians used this plant as food, hence its specific name edulis, meaning eatable. I tried it one day, but I guess my taste is prejudiced in favor of lettuce as a salad. However, it might be more palatable cooked as greens.

In hard clay soil there grows Hasseanthus multicaulis, a little one, about half a foot high, bearing pretty star-shaped flowers on spreading branches. The stem leaves are tiny and dried up by flowering time, and the few basal leaves go early. The three or four stems spring from a little tuber which supplies food and water, carrying it through dry summer months, thus it is in the perennial class wtih the larger types. There is, however, a tiny annual Stonecrop, which I must not pass by. It grows in mid-Spring and would surely be overlooked, except for its bright red color, sometimes making the ground red-carpeted in favorable places. It only stands an inch or so high, and you can well believe a lens is necessary to discern the tiny flower parts. Its botanical name Tillaea Minima is quite appropriate for this Liliputian of the Stonecrop family.

Now that we are on the subject of plants that store water, and are consequently fit to be grown on arid land, the humble but useful "Ice-plant" calls for recognition. We have many species in cultivation, but none are more interesting than our three natives. Mesembryanthemum crystallinum claims first attention. In Spring the leaves of this crystalline-bedecked plant are large but as summer comes on, the stems lengthen, grow smaller leaves, and the large basal ones wither away. A red stain permeates the glistening stems and flower parts, and, behold, a beautiful red rug is laid out upon the ground inviting you to a seat, or per-

haps better said, daring you to a seat. During Exposition times, a young man from the far East and unacquainted with the nature of this plant picked out a large soft one on which to enjoy the lunch he and his young lady friend had brought along. They enjoyed the lunch, but walked home, rather than exhibit the somewhat grotesquely stained white skirt and trousers!

Often growing with this plant is a smaller kind with small cylindrical leaves and white flowers. It has the same red stain and makes a pretty contrast with its coarser cousin. Its name is Mesembryanthemum nudiflorum. The genus name of these ice-plants seems rather unwieldly until you know its meaning in English. Mesembria is the Greek word for mid-day and anthemon is blossom. Thus the slightly changed compound word Mesembryanthemum means mid-day blossom. Another one, called "Sea-fig" whose specific name is aequilaterale, is often seen growing on the seaside cliffs, but is not so common with us as the two above mentioned. Further north it is the only one, and as a boy I have often paused in a scramble over steep places by the sea to suck out the pulp of its fruit. It is salty of taste and to my notion the common name "Beach apple" matched the taste best, while "sea-fig" fits its texture.

Just now the main Elfinwood cover, "Chamise" (Adenostoma fasciculata) has burst into bloom. Whole hillsides and mesas are bright with it. Close inspection displays a veritable cloud of tiny cream-colored blossoms, which later will dry into a reddish-brown. The leaves of this wide spread Elfinwood look like a small bundle of exclamation marks without the dots, in other words they are fascicled, as is indicated by the specific name fasciculata. The branches are thickly clothed with them, and the similarity to "Wild Buckwheat" (Eriogonum fasciculatum) is noticeable, especially on account of fascicled leaves. However, there is little chance of confusion for the Buckwheat flower clusters are flat topped on long leafless stems, the buds often deep pink. The "Chamise" is often called "Greasewood" on account of its highly inflammable wood, when dry, but this is a poor name for many other shrubs burn just as fiercely.

Further in the mountains another species is noticeable, "Red Shank" (Adenostoma sparsifolium). The reddish bark hangs in shreds, and the leaves are sparsely set and longer. It, too, has feathery panicles of creamy bloom.

Adolphia canyon of which I have spoken in a recent issue, boasts another unusual shrub. It is in bloom now, the first part of June, and its pearly white Manzanita-like flowers are very attractive. Later the berries, instead of being smooth like most Manzanitas, are granular surfaced, the leaf edges are finely toothed, and the bark is shreddy-gray, very unlike the smooth bark of the rest of the family. Its revolute leaves are similar appearing to our common revolute-leaved Manzanita, Arctostapylos bicolor, but, on the whole, it is a larger and very different appearing bush. The fact that it has traits of both Manzanita and Arbutus, and a few of its own is puzzling to the botanists, but until they have it straightened out, we can truthfully enough call it Summer blooming Manzanita.

The other day I took a stroll over to "my canyon-side study," a place of wild plants, typical of many San Diego Canyon sides. As I approached it the mesa grasses, now well dried, were almost hidden by Tarweed, not so very colorful in mass and yet close inspection reveals nifty black pistils protruding from the yellow disk, and with a lens you see real beauty. This yellow one is Hemizonia fasciculata, and a delicate wide spreading species which gracefully bears small white-rayed heads is Hemizonia tenella. Sometimes the white rays are marked with a purple dash. In the canyon, too, summer had plainly arrived.

The tender plants of Spring were mostly gone, but gorgeously taking their place were poising here and there, on tall slender stalks, cups of yellow gold. The petals of this wonderful "Mariposa Lily" (Calochortus Weedii) are inside covered with slender yellow hairs, each springing from a tiny purple dot. Sometimes the outside and margins are splashed or tinged with purplish brown and the edges finely fringed. The stems of this rich product of sunshine are covered with a bluish bloom, easily rubbed off in handling. The stem leaves are short and delicate-tipped as a hair, the basal leaves long and grass-like. Withal it is a summer queen, and "Solomon in all his glory was not arrayed like one of these."

WILD FLOWERS

"Springing in valleys green and low,
And on the mountains high,
And in the silent wilderness
Where no man passeth by."

There is no glory in star or blossom
Till looked upon by a loving eye;
There is no fragrance in April breezes
Till breathed with joy as they wander by.
—William Cullen Bryant.

——BUY W. S. S.——

"Aye, there's the rub," you think when you dream of Aladdin's slaves. Aladdin never had slaves half so powerful as the man who has savings. Begin today with War Savings Stamps, "always worth more than they cost you."

The July Vegetable Garden

By Walter Birch

The operations in the garden during July being principally confined to the care of the growing vegetables, the writer thinks a few remarks on the potato would be interesting at this time. Owing to the high price and increasing scarcity of good potatoes, any information that will help the home gardener to grow this, hardest to be done without, vegetable, should be acceptable. The most favorable months for planting potatoes in the home garden in San Diego are September and October, and January, February and March, beginning about the middle of January.

The greatest difficulty to successful potato raising at the present time, is the difficulty in procuring good seed. No one realizes this more than the dealer who, after scouring the county all over for a really first class seed potato, usually has to content himself with a medium good or poor article, for which he pays a big price. However, all potato growers, large or small, can help to rectify this condition if they make the effort. The following remarks are largely taken from some of the best potato authorities in the state.

"In small fields or home gardens where potatoes are grown largely for home use, seed may be selected from plants already growing by noting and marking those apparently true to type and free from varietal mixtures, also those that are strong and free from disease. The variation in variety can be best noted at blossoming time. After digging, the hills that were marked should be further examined and the selected stock should be free from insect pests, such as the tuber moth larvae and the common nematode or ellworm, which belongs to a phylum of animals far below insects. Only potatoes from the most productive hills should be saved for seed purposes. Potatoes intended for seed should be carefully handled and stored in a cool, well ventilated place. With proper care, they may be ready for replanting in from four to six weeks, or by keeping thoroughly dormant may be held for several months. Potato seed may be certified by having the crop inspected and approved by inspectors of the State Department of Agriculture during the growing season and after harvesting, rogueing weak and diseased plants, also those showing varietal mixtures, etc., in accordance with the rules of the department.

What constitutes good seed? Good seed is that which is free from disease or insect pests, that which is developed from productive plants, is not over ripe, of a medium, uniform size and shape, firm and sound, true to name and free from varietal mixtures.

The most common diseases potatoes are subject to, perhaps, are common scab, affecting the exterior of the tuber; Rhizoctonia, affecting the vines particularly. Fusarium wilt and late blight, affecting vines and interior tubers.

For control of scab and Rhizoctonia, all potatoes, immediately before cutting and planting, should be treated by soaking in a formalin or corrosive sublimate solution to kill the spark of the disease resting on the surface of the tubers. The formalin solution is most commonly used where the sprouts have not started, using one pound of formalin to thirty gallons of water, soaking the seed from one and one-half to two hours. If the sprouts have started, use the corrosive sublimate solution, using four ounces of corrosive sublimate to thirty gallons of water and soaking for the same length of time as for the formalin mixture. Corrosive sublimate solution should be mixed in a wooden vessel and care taken in handlig it, as it is a very active poison.

Association Directors Elect Officers

At a recent meeting of the directors of the Floral Association the following officers were elected for the ensuing year:

President, G. R. Gorton.
Vice-President, Mrs. Mary Greer.
Secretary, Miss Leda Klauber.
Treasurer, William P. Brothers.

WHERE DO YOU GET OFF?

If you Ride the Merry-Go-Round?

The man on the wooden horse is like the man who works week after week without saving money. He gets nowhere.

The one sure way to succeed is to save. You can't lose on savings put into War Savings Stamps and Treasury Savings Certificates. They are always worth more than you paid for them.

BIRDS AND GARDENS

By F. C. Arter

My plea for coming to the Garden with what follows is that there has been a precedent established; a letting down of the bars for other than garden subjects. Some time ago our new "Head gardener," probably through an advertence, left the garden gate open and true to their imbred perversity, their unlimited capacity for butting into trouble, the chickens at once found their way through its open portal.

In an ornithological way, no doubt, finches, humming birds, orioles, etc., would be classed with "Chickens" (Aves.), hence it would be unfair to keep birds out of the Garden. Fact is, you can't keep birds out of any sort of garden, a fact attested by all vegetable and flower growers. You can't even keep birds out of a lathhouse, as I distinctly recall seeing a nest of young hummers just ready to try their gauzy wings in a maiden "hop off" on a certain very pleasant occasion at the home of Mr. Robinson.

During the early days of last May (1919), I had the pleasure of observing the domestic affairs of a pair of house finches or linnets that had established their home under the eaves of the front porch in an abandoned nest which had been built in a climbing rose bush attached to a raised fillet on the entablature of the porch. The nest was in such position that their every move could be seen from the front window. This nest was built by a pair of finches (probably the same pair) the year previous, and was watched with much interest, but the baby birds were destroyed, I suspect, by some blood-thirsty shrikes that were seen in the vicinity of the nest. I was delighted to find the nest again occupied, which was discovered about the time the young birds were hatched.

It was interesting to note the part that papa finch was playing in household matters, so unlike the modern home of genus Homo. Indeed he seemed to be the "sole dependence" of the family of five little omniverous gourmands whose gaping mouths ever called for more and yet more.

I do not wish to raise a question with "birdologists," but I am quite sure, in this case at least, that Lady Finch did not lend assistance in "bringing up" the family. The whole responsibility devolved upon pater familias with, perhaps, some moral aid from his best-beloved.

All the time they were under observation (ten days), they were fed by the male, the female rarely making her appearance near the nest. What seemed to be apparent—yet I hesitate to state it—was that the young were fed by regurgitation at all periods of their growth. This is true, or the food was in such small bits as to be completely concealed in his beak and there was no discernable difference in the method of transference. Be this as it may, the youngsters throve on their diet. It was amusing to see five little heads pop up on the approach of the parent, looking so like some funny little flower stuck on a slender stalk swayed by a gentle breeze. Their concerted cries did not seem to disturb him, but with paternal impartiality he would deposit a morsel into two or three of the wobbly crimson craters, then off he would go, when all heads would drop back into the depths of the nest to await papa finch's return, when no doubt those previously luckless ones received their due portion.

As the fledgelings grew their quarters seemed to contrast until they fairly spilled over the brim, and such scrambling for first helpings when daddy brought the bacon home. The young did not all leave the nest on the same day. I was fortunate enough to witness the first youngster's initial flight. He had fluttered out onto the rose vine a little space, and as the old bird left the nest after feeding, this venturesome little fellow made his plunge and lit on the lawn about three rods away and from there into the back yard among some berry bushes. Thus he, with his mates who had shared his bed and board and who had followed in a day or two, made their debut out into the great wide world little ensconced as they had been up under about them and of which they had seen so the eaves of the house.

I will supplement the above with a short account of a family of Anna Humming birds that nested in a climbing Reve de Or rose bush that grew by the front porch. The nest was discovered just previous to the time the first tiny egg was deposited. It was so situated that we could sit within a few feet and observe their every movement.

Two eggs were deposited when incubation began, lasting about thirteen days. O! those tiny mites, it seemed a question whether they were really living entities or only a bit of protoplasm—a mere nucleus round which something might perchance develop. The mother hummer seemed to brave no doubts matter, and the way she did hustle for those babies. We called the mother bird Teeny, the babies Tiny and Tony.

They grew very rapidly, being fed often and generously. It seemed a rather hazardous undertaking to try to administer nourishment to such a shapeless mass, through

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Patronize the Garden Advertisers.

THE ANNUAL MEETING

The annual meeting of The Floral Association was held in the music rooms of the Gray-Maw Company on the 15th of July. The rooms were tastefully decorated by Miss Sessions chiefly with a mass of beautifully arranged Eucalyptus ficifolia, Romneya Coulteri and a quantity of fine Doazon dahlias. There was also an attractive basket of Quis-qualis Indica. This blossoming vine is as beautiful as its name is difficult to memorize. Miss Mary Matthews displayed a beautiful new Belgian introduction, the "Climax," latest variety of Michaelmas daisy or fall astor, and Miss Sessions showed a number of excellent specimens of heather which have taken very kindly to our climate. Gladioli shown by Mr. Cushman and Mr. Lawrence received much admiration. In fact, the flower lovers found it hard to leave these blossoms after only a superficial gaze and settle down to a consideration of affairs relative to the ensuing year.

In order to place us in a receptive mood, a musical program was generously given us. Miss Louise Rector played a Prelude of McDowell's; Mr. H. K. Murray, a floral association member, sang "A Bowl of Roses;" Mrs. Buell rendered a charming group of three songs and Miss Frances Garland played an Etude from Liszt. These artists, through so liberally contributing of their talent, lent much to the enjoyment of the evening.

Mr. Gorton gave a resume of the year's work. He spoke of the untiring efforts of the committee in supplying Camp Kearny with flowers for the men in the Hospital Wards. This work started in February, 1918, and continued until January of this year. At this point let us pause and salute Mrs. Greer who remained loyally at her post throughout all these months. Mr. Gorton spoke of the courtesy of the San Diego & Arizona officials in allowing us the use of their waiting room. At the time the fleet celebration was held, our association supplied flowers in abundance to the ships and decorated the rooms of the distinguished visitors at the Grant Hotel. A basket of the aforementioned Quis-qualis Indica was sent to the suite of President and Mrs. Wilson at the time of their visit, and the Association was honored by Mrs. Wilson wearing orchids which had been arranged as a corsage bouquet. On the day of the opening of the Railroad a float was decorated by the Association.

Mr. Gorton mentioned the Wild Flower Lectures which were given by Mr. Francis M. Fultz under the auspices of the Association. These were delightfully illustrated with slides and those who attended are hoping to have an opportunity of hearing more of these lectures in the future.

The appointment of a Street Tree Committee was another activity of the Association worthy of note. At a meeting at which a number of the Councilmen were present, it was suggested that a committee from the Association be appointed to act with the council in an advisory capacity. It was most fitting that this meeting should have been held at the home of Mr. Marston and that he should be chairman of this committee, as no citizen among us has advocated more strongly the necessity of planting trees, not only that our city may be beautified, but that they may become a commercial asset. Only last week an association member was told by some one who lives in a city where the founders had the foresight to plant trees, that she did not believe she would care to live in San Diego because there were so few trees on our city streets. The initial meeting has already been held with the city council and we are hoping great things for the future.

The President spoke of the project to conserve the El Monte oaks. The committee expects to give a complete report at a later date.

Mr. Gorton's talk was followed by the Secretary's report. There were twelve evening meetings held at the homes of members and two out of door meetings, the first at the residence of the A. G. Robinson's and the second at Mr. and Mrs. J. Wangenheim's.

The Secretary read a note of invitation to the Association for an outdoor meeting to be held at the home of Mr .and Mrs. B. F. Hobart on Wednesday, June 23rd.

At present there is a list of 350 members and subscribers, in and about San Diego, but after the remarks of some of those present relative to our giving our readers and members so much for so little, we hope this list may be increased 50 per cent by our next annual meeting. Please every one observe that a motion was made and carried that the price of "The California Garden" remain the same, but that each member endeavor to secure three new subscribers so that the magazine may continue to live. If any one finds it easier to secure a new advertisement, the editor will not object.

Mr. Robinson captivated us all, as he always does, when he can be persuaded to open his lips and hold forth in his unusual manner. He told us many things which we do not believe to be true of how the association succeeded only after he had ceased to run it.

As there was a splendid report of Mr. Robinson's plan for a home for the Association in the San Diego Union the day follow-

ing the meeting, we will not repeat it here. The members derived much pleasure from Mr. Robinson's talk and though he apologized for talking overtime we wished for more at the conclusion of his address.

Mr. Robinson offered the hospitality on the behalf of his wife and himself of Rosecroft for a meeting on July 29th. The members of the Association are looking forward with glee to the opportunity of once more viewing the marvels of the lath house, as well as meeting our host and hostess.

Miss Katherine Jones gave us a short address. She is an instructor at the University of California and is touring Southern California with a party of students interested in landscape gardening.

Mr. Hieatt rendered a splendid report of the flower shows. There were 284 entries and 82 different exhibitors at the Spring Show. Though a greater number were represented than at any previous show, Mr. Hieatt hopes that there may be twice as many at our next rose exhibit. Through his able championship, he has aroused a new interest in exhibitions.

The meeting concluded with the election of a Board of Directors for the coming year. Those chosen were Mr. G. R. Gorton, Mr. F. L. Hieatt, Mr. William P. Brothers, Mrs. Mary G. Greer, Miss Kate Sessions, Miss Mary Mathews and Miss Leda Klauber.

The Burning Bush

Continued from page 2

axil of the leaves. That part of the bud exposed to full sun is a rusty red color, which accentuates the rich golden color of the flowers. They are of larger size, so also are the leaves larger than those of F. Californica; moreover this species blooms with me, eight months of the year.

Our native species produces light brown colored seeds and the flowers, which are very much lighter in color than its Mexican brother, on the spurs of the previous year's growth, and its season of flowering is during the early summer only.

Both species are beset with stinging hairs, which are very irritating if the seed pods are handled without leather gloves. The flowers are without petals, the beautiful golden colored cups made up of the calyx, as are the white flowers of the "Dogwood." This is one plant which will not endure water other than the winter rains. If you want to kill it, and our shrubby poppy—Dendromicon rigidum—water both during the summer months.

Now is the time to plant Fremontia, and many a garden would be greatly enhanced in beauty were this subject to take the place of the good old fashioned, fragrant "lilac," which is a misfit in this climate.

The marvel to me is, how tenaciously people will cling to an idea which was instilled into their minds in early life. If brought up in the "east" where Paeonias grow to perfection, they must have the same thing here. Forsythias, Wigelias, Syringa—the lilac previously referred to—Deutzias, and a host of other things which might be named, all of which are in their glory east of the Rocky Mountains, are worthless for landscape adornment in this Southland.

BULBS MAY BE GROWN OVER VERY WIDE AREA

The United States uses every year, in normal times, about $2,000,000 worth of bulbs and has produced hardly $25,000 worth of Dutch bulbs in any one year—this despite the fact that few plants are more widely adapted and few crops more easily grown than bulbs.

The reason for this situation, says the United States Department of Agriculture, is that it has always been thought that the bulbs could be bought cheaper than they could be grown. In the future, however, conditions are going to be different, and the department has published Bulletin No. 797, "Commercial Dutch-Bulb Culture in the United States." This 50-page discussion of the subject is available for limited distribution to interested persons.

Thus far, says the bulletin, commercial production of Dutch bulbs in this country has been confined to the Atlantic and Pacific seaboards, north of Norfolk and San Francisco, respectively. Good bulbs have been produced in both regions. The western area is confined to a rather narrow strip which receives suitable rainfall and is sufficiently affected by seacoast conditions to prevent rapid transition from winter to summer. Heat and mois-

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ture conditions are not so sharply defined in the East, and the bulb area is much more indefinite as to width.

Succeed Under Many Conditions

In the interior, in the Ohio and Mississippi Valleys, small quantities of tulip and narcissus bulbs have been grown sufficently long to show the possibility of the successful production of many varieties.

Some of the hardier and more robust of the narcissus varieties thrive well and naturalize even in the Gulf States, but this region is best adapted to the so-called South France stocks. The growing of tulips and Dutch hyacinths probably should not be attempted there.

Contrary to what would be generally supposed, it is not too cold for tulips and narcissi to succeed as far north as Sitka, Alaska. They thrive well along the entire northern border of the United States wherever the moisture conditions are suitable.

Thus it will be seen that these stocks succeed under a great diversity of conditions. Indeed, they seem to be as adaptable as ordinary cultivated crops.

The successes with the three main groups of these bulbs on the northern Pacific cosat; the large production of a long list of narcissus varieties in southern Illinois and Vrginia; the culture of Darwin and other tulips in, Michigan, northern New York, Ontario and Virginia; and the admirable hyacinth bulbs often produced in private gardens throughout the region south of New York, under conditions of comparative neglect and a large measure of ignorance of their life history, would seem to prove sufficiently that we have an abundant territory adapted to growing these stocks.

Not Confined to Sandy Soil

"The culture of bulbs," continues the bulletin, "is associated in the public mind with sandy soil, and the preponderance of advice as to their handling specifies sandy soils as preferable to any other. Periodical literature especially is full of reference to the so-called 'sand-dune bulb fields' of the Netherlands. Abundant evidence is at hand to show that purchasers of bulbs have good success in flowering them on almost any soil which is available, and though this is a very different matter from producing the bulbs with flowers in them it is nevertheless a proof of the wide adaptability of these stocks.

"In the experiments at Bellingham, Wash., thus far, better tulips and better narcissus bulbs have been produced on silty soil than upon the lighter sandy soils. The trials with hyacinths are not decisive; indeed, other factors may account for the results. Proper fertility has not always been maintained, and the heavier soils are less exhausted by long cropping. While this may be true, the fact stands out prominently that the production to tulip, narcissus, and even hyacinth bulbs of good quality can be accomplished on silt-loam soils underlain by clay at a depth of 16 inches. On the other hand, it should be realized that the ability to produce bulbs at a profit will be the controlling factor, and the expense is much less on light than on heavy soils.

"When all is said, few plants are more widely adaptable and few crops more easily grown than bulbs. The regions in this country are few and small, indeed, where some varieties of each of the three groups are not successful when grown for ornamentation, and the possibility of the production of bulb crops is promising. The flowering of the bulbs as we know, is accomplished in a great variety of media, almost anything, from water to ordinary loam soils, answering the purpose provided the atmospheric conditions are suitable.

"Mechanics probably has more to do with the suitability of sandy soil than any inherent preference of the bulbs for said rather than for heavier loam. It is possible that it

Continued on page 11

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Interrelation of Humus and Windbreak

By Bronte A. Reynolds, Editor, State Department of Agriculture

Much practical information has been printed which shows the value of humus content in the upbuilding and maintenance of the farm and orchard and garden, but in all of these timely discussions little or no mention is made of the relation of the "windbreak" as an agency in retarding the depletion of soil vitality through the attendant losses of soil moisture, soil particles, and the eventual disintegration of one time humus content.

Now so important a part does the windbreak play as a factor for the proper and economic conduct of the valley farm in particular, that when we come to analyze these problems we may see clearly that without the safe-guarding influence of a well constituted windshield at least a large part of the effort expended on farm and orchard and garden is rendered impotent.

The value of the windbreak in conserving the humus content of a given area will be understood when one realizes that the plant foods in humus are made easily available for plant use, also that those of the soil itself are rendered available; therefore adequate protection of humus in soils is in a measure the equivalent of adding so much complete fertilizer.

Soils rich in humus are warmer, other things being equal, than are other soils, and this is an important fact to the fruit and vegetable grower since it advances maturity of the crops.

Humus increases capillary action by improving the structure of the soil, and hence, moisture efficiency, facilitating the movement of water and plant food toward the feeding roots, replenishing these when removed by absorption into the plant body.

In the arid regions perhaps the greatest usefulness of humus is in increasing the power of the soil to hold water, which it does in a remarkable degree. A sandy loam will normally retain 10 to 15 per cent of its weight of water and a clay 25 to 35 per cent, humus will retain 200 to 300 per cent of the same. But, where water is rapidly removed by evaporation the value of this property is beyond dispute.

A relatively large amount of organic matter is required to produce a given amount of humus; therefore, as a matter of fact a given amount of humus represents a much larger amount of ordinary organic matter.

Thus, aside from the many other aspects contributing to the value of the windbreak as a potent factor in agricultural economy, it may be seen that this single feature, of the conservation of humus through the retention of soil particle and soil water, is one most vital and at once the one most neglected, when the simplicity and economy of the remedy are so apparent.

Ramona Club Holds Flower Show

The third annual Flower show under the management of the Women's Club of Ramona, which was held recently, shows a healthy increase, both in entries and attendance, over previous exhibits.

An address by Miss Kate Sessions on the native flowers, shrubs and trees was well received. She recommended the use of native flowers and shrubs as planting material for use along the boulevard into the Ramona Valley.

The children and faculty of the Ramona High School assembled and exhibited a collection of over one hundred species of wild flowers.

The roses exhibited by various entrants were of especially high quality, apparently indicating that that particular portion of San Diego County is capable of producing blooms of decided merit.

A CORRECTION

Our attention has been directed to the fact that in the article on Avocado varieties by William H. Sallmon in the June issue a line was omitted which entirely changed the meaning of the text. The omission occurred in the portion of the article devoted to the Puebla variety. The sentence as there printed reads, "The period required from the blossoms to the maturity of the fruit is the shortest of any kind on the list, requiring a year and a half," and should read, "The period required from the blossoms to the maturity of fruit is the shortest of any kind on the list, requiring only **about eight months, while the Sharpless requires** a year and a half.

We trust that this correction will reach the eyes of all those who read the original article, so that the misleading impression may be corrected.

THE MOTH

"Now busily convened upon the bud
That crowns the genial branch, they feast sublime,
And spread their muslin canopy around,
Pavilioned richer than the proudest kings."

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THE DOLLAR TREE

By Fidella G. Woodcock

All in the wind the tree-lights are moving,
A-waving and a-waving in the sun:
But with many righteous efforts not a dollar tree is found
And the bloom of a dollar is not one.
Why this mystery that money uncreated must be made,
Human creeds can scarcely flourish
By the hoe or by the spade.
In the roaming field of finance, a most unromantic spot
Just one tree got into a Gordian knot
Of snarling, twisted limblets for a wizard to undo
With its rake-offs and its round-ups, with its
Moonshine through and through.
If it takes the last degree of sense to make the Dealing square
I'll plant the drastic dollar till its
Shape is ripe and fair,
Roast the lumpy, lumpy watch-dog
On his blue Kentucky sward
Standing fire, like a rooted spell for every Step on guard:
Under the guns he's watched till both eyes Are like two burnt peas,
The well distended jaws are wont to Swallow the whole cheese.
One couldn't vivisect him, he's so like a human thing,
We cannot roast alive his greed
He's so faithful to the ring.
So with spirits fine as shaving
While the tree-lights are a-waving
We'll cut the buds and grapes that can be found
While the monster's being X-rayed for his secret,
On the ground.
And if there's ever a spot where
The dollar-tree will grow
In my own back yard I'll plant it in a shady well-kept row.
Where face value will be good for every crying need
That transfigures sturdy worth into consecrated seed.
Then my dollars, dollars, dollars will as sweet,
Untainted be
As the promise in the rainbow that is good for you and me.

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——BUY W. S. S.——

GOSSIP

Mr. E. T. Sturtevant, Nurseryman from Hollywood, visited San Diego recently. Mr. Sturtevant is one of the leading authorities on aquatics in America, and has contributed many valuable species to this useful class of ornamentals.

Mr. I. Wilkansky, Director of the Agricultural Department of the Zionist Commission at Jerusalem, spent several days in San Diego and vicinity as the guest of the County Horticultural Commissioner, studying varieties and cultural requirements of both ornamental and economic trees and plants grown in Southern California. Mr. Wilkansky, who succeeds Mr. Aaron Aaronsohn in charge of the Jewish Experiment Station and as collaborator of the United States Bureau of Plant Introduction, is perfecting plans for a chain of experiment stations throughout Palestine, the establishment of irrigation systems where needed, and the general agricultural and horticultural development of this land of the Bible. Mr. Wilkansky was accompanied by his brother and by Mr. I. Gutmann, irrigation engineer for the Commission.

J. B. Pilkington, prominent nurseryman and rose grower, was the guest of Superintendent of Parks Morley in San Diego last month. Mr. Pilkington has shipped many of the famed Oregon roses into this state, and is well known to many Californians.

BULB GROWING

Continued from page 9

will be cheaper to add heavy applications of fertilizer than to handle the bulbs in heavy soils. On the other hand, many varieties will coat up better on light than on heavy soils. The character of the bulbs grown on heavy and on light soils will vary somewhat, as it with with shallow and deep planting. The indications are, however, that success can be attained in bulb production on a friable loam soil, whether it has a preponderance of sand in its composition or not."

Other Phases Discussed

Other phases of the subject discussed in the bulletin include temperature, soil and fertility requirements, number of bulbs grown per acre, planting, depth of planting, treatment after flowering, roguing, harvesting the flowers, cultivation, harvesting the bulbs, storing and curing, cleaning, sizing and advantages to be gained by it, culling, propagation, determination of flowering quality, packing, shipping, bulb growing for pleasure, out-of-door culture, indoor culture, miscellaneous bulbs, insect pests, fire disease of the tulip,

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G. R. Gorton, Editor
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Floral Association Meetings

The Floral Association meets regularly on the third Tuesday evening of each month at the homes mentioned below.

All persons interested in gardening are welcome at these meetings.

July—Mrs. C. F. Naylor, 3520 Oregon street. Subject: "Cacti and Other Succulents."

August—Mrs. W. L. Frevert, 3535 First street. Subject: "California Wild Flowers."

BIRDS AND GARDENS

Continued from page 6

such a long saber-like beak, but they were regular little "sword-swallowers" and no fatalities resulted. It was amusing to watch the process after they had become well grown. When Teeny would light on the edge of the nest the youngsters would stretch up to the full length of their wabbly necks when she would have to tiptoe and crane her neck to reach the right spot—which seemed to be down in the sub-basement of their little tummies.

As a final act in the process of feeding, she would give her head a vigorous shake, as if to make sure that it reached its right destination.

Two weeks from incubation they were foully dealt with by a beastly cat. Old "Booker" was suspected of the crime, and is still under the ban. I say "old," advisedly, he is an heirloom of one of the first families of our neighborhood. His present incarnation dates back to the year A. D. 1907. Some time ago he met with a catastrophe that nearly cost him one of his lives, as a result of an over indulgence in rough-on-rats—and cats. He lingered in the "shadows" for some time, but regained his health through the skillful ministrations of a lady M. D., and now, alas! there is no telling how long he may survive.

It was pathetic to see the mother bird return to the nest, peck at it and utter a plaintive little cry that may well have been one of grief.

BULB GROWING

Continued from page 11

diseases of hyacinths, the mosaic disease, best varieties of hyacinth to plant, varieties of narcissi, varieties of tulips, and varieties of hyacinths.

The sources from which interested persons may obtain bulb literature are given, and the bulletin ends with several pages of definitions of terms, strange to the unitiated, that are likely to be found in bulb literature and catalogues.

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